IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

Application of:

: Examiner: Olga Hernandez

Ralf DUCKECK et al.

For:

NAVIGATION METHOD

AND DEVICE

Filed:

May 16, 2002

: Art Unit: 3661

Serial No.:

10/019,894

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Confirmation No.

6195

-BRIEF

Commissioner for Patents, RO. Box 1450 Alexandria, VA 22313-1450 on

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Signature:

AARON & DEDITCH

(33,865)

APPEAL BRIEF TRANSMITTAL AND PETITION TO EXTEND

SIR:

Accompanying this Appeal Brief Transmittal is an Appeal Brief pursuant to 37 C.F.R. § 1.192(a) in triplicate for filing in the above-identified patent application.

This is also a Petition To Extend Under 37 C.F.R. § 1.136(a) to extend the twomonth response date by two (2) months from the two-month date of May 22, 2004 to July 22, 2004 (the Notice of Appeal was mailed on March 18, 2004 and filed in the Patent Office on March 22, 2004, which makes the two-month date of May 22, 2004).

Please charge the appropriate fees of \$750.00, which includes the Appeal Brief fee under 37 C.F.R. § 1.17(c) (which is believed to be \$330.00) and the Rule 136(a) extension fee (which is believed to be \$420.00 for a two-month extension), to Deposit Account No. 11-0600. The Commissioner is also authorized, as necessary and/or appropriate, to charge any additional and appropriate fees, including any further Rule 136(a) extension fees, or credit any overpayment to Deposit Account No. 11-0600. Two duplicate copies of this transmittal are enclosed for these purposes.

Dated:

Respectfully submitted,

07/21/2004 YPOLITE1 00000009 110600

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[10191/2142]

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AARON C. DEDITCH

(33,865)

APPEAL BRIEF PURSUANT TO 37 C.F.R. § 1.192(a)

SIR:

In the above-identified patent application ("the present application"), Appellant mailed a Notice Of Appeal on March 18, 2004 from the Final Office Action mailed by the U.S. Patent and Trademark Office on September 29, 2003. The Notice was filed on March 22, 2004, so that the two-month appeal brief filing date is May 22, 2004, which has been extended by two months from May 22, 2004 to July 22, 2004 by the accompanying Transmittal and Petition to Extend. In the Final Office Action, claims 6 to 10 were finally rejected.

An Amendment After A Final Office Action was mailed on January 6, 2004. An Advisory Action was mailed on February 3, 2004.

In accordance with 37 C.F.R. § 1.192(a), this Appeal Brief is being submitted in triplicate in support of the appeal of the final rejections of claims 6 to 10. It is respectfully submitted that the final rejections of claims 6 to 10 should be reversed for the reasons set forth below.

1. REAL PARTY IN INTEREST

The real party in interest in the present appeal is Robert Bosch GmbH ("Robert Bosch") of Stuttgart in the Federal Republic of Germany. Robert Bosch is the assignee of the entire right, title and interest in the present application.

2. RELATED APPEALS AND INTERFERENCES

There are no interferences or other appeals related to the present application, which "will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal".

3. STATUS OF CLAIMS

1. Claims 6 to 10 were rejected under 35 U.S.C. § 103(a) as unpatentable over the Roeseler et al., U.S. Patent No. 6,317,684 (the "Roeseler" reference) in view of Hessing et al., U.S. Patent No. 6,334,089 (the "Hessing" reference).

4. STATUS OF AMENDMENTS

In response to the Final Office Action mailed on September 29, 2003, Appellant filed an Amendment After A Final Office Action ("the Amendment After Final"), which was mailed on January 6, 2004.

5. SUMMARY OF THE INVENTION

The subject matter of the present application is directed to addressing the following problems and/or providing the following benefits.

The methods and systems of the present invention are applicable to any information systems having an information supply delivered from an external site or a control center to a plurality of information addressees. The exemplary embodiments and exemplary methods of the present invention (and the problem on which they are based) are explained with respect to an on-board navigation system in an automobile and its connection to a central traffic control system. (Specification, page 5, lines 10 to 17).

In an exemplary embodiment and/or exemplary method of the present invention, the

data required for optimized route planning, which must be transmitted from a traffic control center to a motor vehicle navigation system, is reduced to a lesser amount. Only the information needed for driving on an alternative section of the route is transmitted. This information represents deviations from the route calculated in the motor vehicle navigation system, and is therefore referred to below as delta information. Due to this measure, the entire volume of data to be transmitted remains relatively small even with a large number of users, and thus the cost for each individual remains low. (Specification, page 2, line 34 to page 3, line 10).

The exemplary embodiment and/or exemplary method of the present invention involves transmitting only the information actually needed over the mobile wireless network and also to efficiently utilize the on-board computer resources available in the vehicle for calculation of routes. (Specification, page 3, lines 12 to 16).

According to one aspect of the exemplary embodiment and/or exemplary method of the present invention, when the traffic situation is calm and running smoothly without problems, no data transmission at all is needed between the traffic control center and the vehicle navigation system, whereas strictly off-board systems must transmit all route information from the starting point to the destination. (Specification, page 3, lines 18 to 25).

An exemplary embodiment of the present invention provides that the vehicle navigation system delivers the current vehicle position, the route destination and certain database version information to the traffic control center for initiating an optimized route planning. Using this information, the control center is able to determine which current traffic problems and possibly even which future traffic problems are to be expected for an individual user of the system. The database version information provides the traffic control center with information regarding which database information is locally retrievable in the vehicle with regard to the various sections of the route and which is processable autonomously there. It is believed that this minimum of information is sufficient to be able to effectively and rapidly transmit the required information to the vehicle navigation system. (Specification, page 3, line 27 to page 4, line 5).

According to another aspect of the present invention, an exemplary method is used for specific management of motor vehicle traffic flow. In this exemplary method of the present

invention, information is transmitted from a traffic control center to on-board vehicle navigation systems in the respective vehicles for the purpose of preventing traffic problems, in which case if there is a traffic problem and a plurality of feasible detour routes, the traffic flow may be distributed in an intelligent manner not only to one detour but to this plurality of detours. (Specification, page 4, lines 7 to 16).

According to another exemplary embodiment and/or exemplary method of the present invention, the traffic control center is able to intervene in traffic control to some extent, because not all vehicles need to be guided over the same detour route, and instead all possible reasonable detour routes may be utilized almost uniformly. This may be implemented, e.g., by selecting any feature of the user identification as a selection criterion. If a user identification is composed of digits, for example, its end digit may be used to differentiate users and for controlled rerouting into one of the plurality of route sections. In the case of end digits between 0 and 3, a detour route A may be proposed to this group of users or, if the digits are between 4 and 6, a different detour route B may be proposed accordingly. Otherwise, a route C is proposed. Other options for dividing the group of users may also be used. (Specification, page 4, lines 18 to 33).

Figure 1 shows a schematic block diagram of the steps of an exemplary embodiment during an automobile trip. In a step 100, a user starts the navigation system at the beginning of the trip. In a step 110, the user enters the trip destination. In step 120, the vehicle navigation system determines the current location of the vehicle. In a step 130, the user's preference parameters are input by the system, e.g., whether the user would like to be guided along the fastest route or the shortest route. In this case, the user selects the fastest route. In a step 140, the on-board navigation system autonomously calculates the route desired by the user with the resources available in the vehicle such as traffic network stored data, e.g., from a database stored on a CD and from a computer. In a step 150, the position of the vehicle, its destination, the preference parameters and a version ID number, characterizing the current version of the database stored in the vehicle navigation system are transmitted to the nearest traffic control center. (Specification, page 5, line 19 to page 6, line 5).

In step 155, the route for motor vehicle 20 is calculated in the control center, taking into account any possible traffic problems. If there is no traffic problem which could be

relevant for vehicle 20 at the moment or in the near future (see NO branch in decision tree 160), then there is a branch to step 175 where driving instructions from on-board data calculated by navigation device 25 are output to the driver until the destination is reached. Then the method is concluded in a step 180. (Specification, page 6, lines 20 to 30).

If a traffic problem which may be relevant for the planned trip of vehicle 20 in the corresponding time window is recorded in control center 30 (see YES branch of decision tree 160), then a detour route for bypassing the problem area is calculated in control center 30, and certain data defining the detour route around the disturbance is compiled for transmission to the vehicle. This delta data or delta information, as it is called, characterizes the detour route so completely that on-board navigation system 25 in vehicle 20 is able to synthesize trip instructions for the driver from this information so that the driver is able to navigate the detour route. (Specification, page 6, line 32 to page 7, line 7).

In step 170, the delta data is transmitted to vehicle 20. The delta data is shown with reference number 40 in Fig. 2. The vehicle shown represents the same vehicle in each case. However, two vehicles 20 are shown, because it is moving between steps 150 and 170 (see back to Fig. 1). (Specification, page 7, lines 9 to 13).

In step 175, the driving instructions obtained by vehicle navigation system 25 from delta data 40 are output to the driver until reaching the original route or the original destination of the trip. After returning to the original route, i.e., after driving the entire detour route, the vehicle navigation system again directs the driver further autonomously and independently of the control center. Then in the remaining course of the route, the same or a different traffic control center may again be consulted for possible updates of the trip route. (Specification, page 7, lines 15 to 24).

As more vehicles are equipped with such systems, it will then be more feasible to influence traffic in the sense of managing it through a control center in a better and more comprehensive manner. (Specification, page 8, lines 32 to 36).

Data transmitted from the vehicle to the control center or from the control center to the vehicle may also be compressed by a suitably appropriate or available method to further reduce the volume of data to be transmitted. (Specification, page 9, lines 4 to 7).

The methods described herein are also nestable in many stages in the sense that in the

case of two-stage nesting, for example, the delta data for a tertiary detour route leading away from the primary main route for which a secondary detour route has been already proposed may be put through and processed. (Specification, page 9, lines 9 to 14).

Thus, the present invention is directed to a navigation method for use in an on-board vehicle navigation system, which includes: determining a route in the on-board vehicle navigation system in a vehicle; and transmitting information from a control center to the vehicle information system for use in providing optimized route planning, in which only delta information representing required necessary deviations from a previously determined route for driving an alternative section of the route is transmitted from the control center to the vehicle navigation system. (See claim 6).

The present invention is further directed to the foregoing features, and the further feature in which the transmitting includes transmitting a current vehicle position, a destination of the route and a database version information to the control center to initiate optimized route planning. (See claim 7).

The present invention is further directed to a method for use in controlling management of motor vehicle traffic flow, which includes: transmitting information from a control center to an on-board vehicle navigation system in a vehicle to prevent a traffic problem; and distributing the motor vehicle traffic flow among a plurality of detour segments in a controlled manner when there is a traffic problem and a plurality of feasible detour routes are available. (See claim 8).

The present invention is also directed to a vehicle navigation system for use in a vehicle, which includes: a determining arrangement to determine a route in the vehicle navigation system; and a transmitting arrangement to transmit information from a control center to the vehicle navigation system for use in providing optimized route planning, in which only delta information representing required necessary deviations from a previously determined route for driving an alternative section of the route is transmitted from the control center to the vehicle navigation system. (See claim 9).

The present invention is further directed to a computer program for use in a traffic control center, which includes program code for executing a method for use in controlling management of motor vehicle traffic flow, the method including: transmitting information

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from a control center to an on-board vehicle navigation system in a vehicle to prevent a traffic problem; and distributing the motor vehicle traffic flow among a plurality of detour segments

in a controlled manner when there is a traffic problem and a plurality of feasible detour routes

are available. (See claim 10).

6. <u>ISSUES</u>

1. Under 35 U.S.C. § 103(a), are claims 6 to 10 unpatentable over Roeseler et al.,

U.S. Patent No. 6,317,684 (the "Roeseler" reference) in view of Hessing et al., U.S. Patent

No. 6,334,089 (the "Hessing" reference)?

7. GROUPING OF CLAIMS

<u>Issue 1</u>

Group 1: Claims 6 and 9 stand or fall together.

Group 2: Claim 7 stands alone.

Group 3: Claims 8 to 10 stand or fall together.

8. ARGUMENT

Claims 6 to 10 are currently pending.

ISSUE 1

With respect to paragraph two (2) of the Office Action, claims 6 to 10 were rejected

under 35 U.S.C. 103(a) as unpatentable over Roeseler et al., U.S. Patent No. 6,317,684, in

view of Hessing, U.S. Patent No. 6,334,089.

Group 1 - Claims 6 and 9

Claim 6 is directed to a navigation method for use in an on-board vehicle navigation

system, which includes: determining a route in the on-board vehicle navigation system in a

vehicle; and transmitting information from a control center to the vehicle information system

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for use in providing optimized route planning, in which only delta information representing required necessary deviations from a previously determined route for driving an alternative section of the route is transmitted from the control center to the vehicle navigation system.

Claim 9 is directed to a vehicle navigation system for use in a vehicle, which includes: a determining arrangement to determine a route in the vehicle navigation system; and a transmitting arrangement to transmit information from a control center to the vehicle navigation system for use in providing optimized route planning, in which only delta information representing required necessary deviations from a previously determined route for driving an alternative section of the route is transmitted from the control center to the vehicle navigation system.

The Roeseler reference states that "[i]n a route planning phase, the route planning and navigation system would receive a destination address from a caller and any possible intermediate points or waypoints (or any other preference, like a road along a river), plan the route based on a dynamic map database, and output the planned route to the caller for approval", and "[i]f the caller accepts the route, the caller then may then receive directions from the route planning and navigation system while enroute to the destination." (See Roeseler, col. 3, lines 15 to 23). Furthermore, the Roeseler reference states that "[t]hroughout the caller's route, the route planning and navigation unit may receive updated road condition and traffic information which may be relayed to the caller, whereby the caller may opt to have the route planning and navigation unit provide an alternative route to avoid any traffic problems, weather, etc." such that "the route planning and navigation unit may then re-plan the route based on the new traffic and road condition and the new navigation instructions will be sent to the caller". (See Roeseler, col. 3, lines 37 to 45). In the Roeseler reference, a complete alternative route based on new traffic and road conditions is transmitted to the caller. Thus, the Roeseler reference does not disclose limiting the transmission of route data to transmitting only difference data (delta information), as provided for in the context of claims 6 and 9.

Also, the <u>Hessing</u> reference states that a "navigation system includes an input device by which at least one destination is input thereto, the central server includes means for determining a route for the vehicle from the at least one destination and means for

transmitting the route determined from the at least one destination piecewise to the navigation system." (See Hessing, col. 1, lines 61 to 66). Furthermore, the Hessing reference states that after starting the journey from the starting point A, traffic information is processed and considered in setting up the actual or updated route to be traveled. (See Hessing, col. 4, lines 53 to 56). Also, "[t]he internal route that is set up by the central server 12 can change during the actual travel over the route 1 without the driver's knowledge." (See Hessing, col. 4, lines 56 to 58). In the Hessing reference, the route is modified in relation to traffic conditions such that the complete route is updated before the central server continues to transmit the route to the driver. (See Hessing, col. 4, lines 51 to 64). Thus, the Hessing reference does not disclose limiting the transmission of route data to transmitting only difference data (delta information), as provided for in the context of claims 6 and 9.

Additionally, the Office Action asserts that while "Roeseler does not disclose determining a route in the on-board vehicle navigation system in a vehicle", the "Hessing" reference "teaches it in column 3." (See Office Action, page 3). In fact, the Hessing reference only states that a "central server 12 conducts the information, namely the aforementioned destination B, to a processor 17, which computes an optimum route 16 for reaching the destination", and that the "route 16 is transmitted to the vehicle piecewise by means of the communications link 14". (See Hessing, col. 3, lines 48 to 59). Thus, Hessing only indicates that a route is determined by a processor included in the central server (See Hessing, Figure 1a), so that it does not in any way disclose or suggest that an on-board vehicle navigation system determines a route, as provided for in the context of claims 6 and 9.

As to the rejections of claims 6 and 9, neither the <u>Roeseler</u> reference nor the <u>Hessing</u> reference discloses that "only delta information representing required necessary deviations from a previously determined route for driving an alternative section of the route is transmitted from the control center to the vehicle navigation system", as provided for in the context of claims 6 and 9.

It is therefore respectfully submitted that claims 6 and 9 are allowable for the foregoing reasons.

Group 2 - Claim 7

Claim 7 depends from claim 6, and is therefore allowable for at least the same reasons as claim 6. Claim 7 also includes the further feature that the "transmitting includes transmitting a current vehicle position, a destination of the route and a database version information to the control center to initiate optimized route planning." In this regard, the present application provides the following:

According to an exemplary embodiment, the vehicle navigation system delivers the current vehicle position, the route destination and certain database version information to the traffic control center for initiating an optimized route planning. From this information, the control center is able to determine which current traffic problems and possibly even which future traffic problems are to be expected for an individual user of the system. The database version information provides the traffic control center with information regarding which database information is locally retrievable in the vehicle with regard to the various sections of the route and which is processable autonomously there. It is believed that this minimum of information is sufficient to be able to effectively and rapidly transmit the required information to the vehicle navigation system.

(Specification, page 3, line 27 to page 4, line 5).

As further regards claim 7, there is also no disclosure or suggestion of its subject matter since the Roeseler and Hessing references do not in any way disclose or indicate that database-type information is transmitted to the master station. As to the two systems of the two cited references, it is only indicated that a database is provided in the service center and that a route is calculated only at the service center. In fact, the Roeseler reference states that a "controller 310 receives a route request from the caller" and then "the controller 310 determines the caller's current position and prompts the caller for inputs and receives destination and waypoint information from the caller." (See Roeseler, col. 8, lines 22 to 29). Also, the Hessing reference states that a "central server 12 conducts the information, namely the aforementioned destination B, to a processor 17, which computes an optimum route 16 for reaching the destination with the aid of a detailed map of the entire area stored in the processor 17." Thus, neither the Roeseler reference nor the Hessing reference in any way discloses the feature that database-type information is transmitted to the master station, as provided for in the context of claim 7. Accordingly, claim 7 is allowable for this further

reason.

Group 3 - Claims 8 and 10

Claim 8 is directed to a method for use in controlling management of motor vehicle traffic flow, which includes: transmitting information from a control center to an on-board vehicle navigation system in a vehicle to prevent a traffic problem; and distributing the motor vehicle traffic flow among a plurality of detour segments in a controlled manner when there is a traffic problem and a plurality of feasible detour routes are available.

Claim 10 is directed to a computer program for use in a traffic control center, which includes program code for executing a method for use in controlling management of motor vehicle traffic flow, the method including: transmitting information from a control center to an on-board vehicle navigation system in a vehicle to prevent a traffic problem; and distributing the motor vehicle traffic flow among a plurality of detour segments in a controlled manner when there is a traffic problem and a plurality of feasible detour routes are available.

The <u>Roeseler</u> reference states that a "route planning and navigation unit may then replan the route based on the new traffic and road condition and the new navigation instructions will be sent to the caller". (<u>See Roeseler</u>, col. 3, lines 41 to 45).

Also, the <u>Hessing</u> reference states that "traffic information 18 generated since the start of the journey from the starting point A can be processed by the processor 17 and considered in set up the actual or updated route 16 to be traveled. The internal route that is set up by the central server 12 can change during the actual travel over the route 16 without the driver's knowledge." (See <u>Hessing</u>, col. 4, lines 53 to 58).

The <u>Roeseler</u> and <u>Hessing</u> references discuss that a re-planned route is sent to a caller without consideration of alternative detour routes. Neither the <u>Roeseler</u> reference nor the <u>Hessing</u> reference discloses the feature of distributing motor vehicle traffic flow among a plurality of detour segments in a controlled manner when there is a traffic problem and a plurality of feasible detour routes are available, as provided for in the context of claims 8 and 10.

It is therefore respectfully submitted that the combination of the Roeseler reference

and <u>Hessing</u> reference does not render obvious claims 8 and 10, so that claims 6 to 10 are allowable.

As further regards all of the obviousness rejections discussed herein, in rejecting a claim under 35 U.S.C. § 103(a), the *Office* bears the initial burden of presenting a prima facie case of obviousness. In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish prima facie obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim features. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). Thus, to reject a claim as obvious under 35 U.S.C. § 103, the prior art must disclose or suggest each claim feature and it must also suggest combining the features in the manner contemplated by the claim. (See Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 934 (Fed. Cir. 1990)). cert. denied, 111 S. Ct. 296 (1990); In re Bond, 910 F.2d 831, 834 (Fed. Cir. 1990)).

Moreover, the "problem confronted by the inventor must be considered in determining whether it would have been obvious to combine the references in order to solve the problem." (See Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 679 (Fed. Cir. 1998)). It is respectfully submitted that, as discussed above, the references relied on, whether taken alone or combined, do not suggest in any way modifying or combining the references so as to provide the presently claimed subject matter for addressing the problems and/or providing the benefits discussed herein and in the specification, as explained above.

The cases of <u>In re Fine</u>, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988), and <u>In re Jones</u>, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992), also make plain that the Final Office Action's assertions that it would have been obvious to modify the reference relied upon does not properly support a § 103 rejection. It is respectfully suggested that those cases make plain that the Final Office Action reflects a subjective "obvious to try" standard, and therefore does not reflect the

proper evidence to support an obviousness rejection based on the references relied upon. In particular, the Court in the case of <u>In re Fine</u> stated that:

Instead, the Examiner relies on hindsight in reaching his obviousness determination.... One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

<u>In re Fine</u>, 5 U.S.P.Q.2d at 1600 (citations omitted; emphasis added). Likewise, the Court in the case of In re Jones stated that:

Before the PTO may combine the disclosures of two or more prior art references in order to establish *prima facie* obviousness, there must be some suggestion for doing so, found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. . . .

Conspicuously missing from this record is any evidence, other than the PTO's speculation (if it be called evidence) that one of ordinary skill... would have been motivated to make the modifications... necessary to arrive at the claimed [invention].

In re Jones, 21 U.S.P.Q.2d at 1943 & 1944 (citations omitted; italics in original).

That is exactly the case here since it is believed and respectfully submitted that the Office Action reflects hindsight, reconstruction and speculation, which these cases have indicated does not constitute evidence that will support a proper obviousness finding.

More recently, the Federal Circuit in the case of <u>In re Kotzab</u> has made plain that even if a claim concerns a "technologically simple concept" -- which is not even the case here, there still must be some finding as to the "specific understanding or principle within the knowledge of a skilled artisan" that would motivate a person having no knowledge of the claimed subject matter to "make the combination in the manner claimed", stating that:

In this case, the Examiner and the Board fell into the hindsight trap. The idea of a single sensor controlling multiple valves, as opposed to multiple sensors controlling multiple valves, is a technologically simple concept. With this simple concept in mind, the Patent and Trademark Office found prior art statements that in the abstract appeared to suggest the claimed limitation. But, there was no finding as to the specific

understanding or principle within the knowledge of a skilled artisan that would have motivated one with no knowledge of Kotzab's invention to make the combination in the manner claimed. In light of our holding of the absence of a motivation to combine the teachings in Evans, we conclude that the Board did not make out a proper prima facie case of obviousness in rejecting [the] claims . . . under 35 U.S.C. Section 103(a) over Evans.

(See In re Kotzab, 55 U.S.P.Q.2d 1313, 1318 (Federal Circuit 2000) (italics added)). Here again, it is believed that there have been no such findings to establish that the features discussed above of the rejected claims are met by the reference relied upon. As referred to above, any review of the reference relied upon makes plain that it simply does not describe the features discussed above of the claims as now presented.

More recent still, in the case of *In re Lee*, 61 U.S.P.Q.2d 1430, 1433-35 (Fed. Cir. 2002), the Court reversed the Board of Appeals for relying on conclusory statements, stating the following:

With respect to Lee's application, neither the examiner nor the Board adequately supported the selection and combination of the Nortrup and Thunderchopper references to render obvious that which Lee described. The examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial"do not adequately address the issue of motivation to combine. This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." Thus the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion.

. . . .

In its decision on Lee's patent application, the Board rejected

the need for "any specific hint or suggestion in a particular reference" to support the combination of the Nortrup and Thunderchopper references. Omission of a relevant factor required by precedent is both legal error and arbitrary agency action.

[The] "common knowledge and common sense" on which the Board relied in rejecting Lee's application are not the specialized knowledge and expertise contemplated by the Administrative Procedure Act. Conclusory statements such as those here provided do not fulfill the agency's obligation.

[The] Board's findings must extend to all material facts and must be documented on the record, lest the "haze of so-called expertise" acquire insulation from accountability. "Common knowledge and common sense," even if assumed to derive from the agency's expertise, 'do not substitute for authority when the law requires authority.

Thus, the proper evidence of obviousness must show why there is a suggestion as to the reference so as to provide the subject matter of the claims and its benefits.

In short, there is no evidence that the reference relied upon, whether taken alone or otherwise, would provide the features of the claims discussed above. It is therefore respectfully submitted that the claims are allowable for these reasons.

As further regards all of the obviousness rejections of the claims, it is respectfully submitted that not even a *prima facie* case has been made in the present case for obviousness, since the Office Actions to date never made any findings, such as, for example, regarding in any way whatsoever what a person having ordinary skill in the art would have been at the time the claimed subject matter of the present application was made. (See *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1455 (Fed. Cir. 1998) (the "factual predicates underlying" a *prima facie* "obviousness determination include the scope and content of the prior art, the differences between the prior art and the claimed invention, and the level of ordinary skill in the art")). It is respectfully submitted that the proper test for showing obviousness is what the "combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art", and that the Patent Office must provide particular findings in this regard -- the evidence for which does not include "broad conclusory statements standing alone". (See *In re Kotzab*, 55

U.S.P.Q. 2d 1313, 1317 (Fed. Cir. 2000) (citing *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1618 (Fed. Cir. 1999) (obviousness rejections reversed where no findings were made "concerning the identification of the relevant art", the "level of ordinary skill in the art" or "the nature of the problem to be solved"))). It is respectfully submitted that there has been no such showings by the Office Actions to date or by the Advisory Action.

In fact, the present lack of any of the required factual findings forces the Appellant and this Board to resort to unwarranted speculation to ascertain exactly what facts underly the present obviousness rejections. The law mandates that the allocation of the proof burdens requires that the Patent Office provide the factual basis for rejecting a patent application under 35 U.S.C. § 103. (See *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984) (citing *In re Warner*, 379 F.2d 1011, 1016, 154 U.S.P.Q. 173, 177 (C.C.P.A. 1967))). In short, the Examiner bears the initial burden of presenting a proper prima facie unpatentability case -- which has not been met in the present case. (See *In re Oetiker*, 1977 F.2d 1443, 1445, 24, U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992)).

As further regards the obviousness rejections of claims 6 to 9, the "Hessing" U.S. patent reference is removable as prior art under 35 U.S.C. § 103(c), since this particular reference is only prior art under 35 U.S.C. § 102(e).

In particular, the "Hessing" U.S. patent reference is removable under 35 U.S.C. § 103(c), since it is only a reference under 35 U.S.C. § 102(e). In this regard, Applicant states that the subject matter of the "Hessing" reference and the claimed invention of the present application "were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person", with Robert Bosch GmbH being the "same person". It is therefore respectfully submitted that the foregoing reference must be removed under 35 U.S.C. § 103(c) in view of the foregoing statement, and it is respectfully requested that the obviousness rejections be withdrawn. (See 1241 O.G. 96 (December 26, 2000) concerning revised guidelines for removing a reference under 35 U.S.C. § 103(c), which provides for the attorney of the Applicants to make the "commonly owned" statement).

In short, all of claims 6 to 10 are allowable.

CONCLUSION

In view of the above, it is respectfully requested that the rejections of claims 6 to 10 be reversed, and that these claims be allowed as presented.

Respectfully submitted,

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APPENDIX

- 1-5. (Canceled).
- 6. (Previously Presented) A navigation method for use in an on-board vehicle navigation system, the method comprising:

determining a route in the on-board vehicle navigation system in a vehicle; transmitting information from a control center to the vehicle information system for use in providing optimized route planning, wherein only delta information representing required necessary deviations from a previously determined route for driving an alternative section of the route is transmitted from the control center to the vehicle navigation system.

- 7. (Previously Presented) The method of claim 6, wherein the transmitting includes transmitting a current vehicle position, a destination of the route and a database version information to the control center to initiate optimized route planning.
- 8. (Previously Presented) A method for use in controlling management of motor vehicle traffic flow, the method comprising:

transmitting information from a control center to an on-board vehicle navigation system in a vehicle to prevent a traffic problem; and

distributing the motor vehicle traffic flow among a plurality of detour segments in a controlled manner when there is a traffic problem and a plurality of feasible detour routes are available.

- 9. (Previously Presented) A vehicle navigation system for use in a vehicle, the vehicle navigation system comprising:
 - a determining arrangement to determine a route in the vehicle navigation system;
- a transmitting arrangement to transmit information from a control center to the vehicle navigation system for use in providing optimized route planning, wherein only delta

information representing required necessary deviations from a previously determined route for driving an alternative section of the route is transmitted from the control center to the vehicle navigation system.

10. (Previously Presented) A computer program for use in a traffic control center, comprising program code for executing a method for use in controlling management of motor vehicle traffic flow, the method including:

transmitting information from a control center to an on-board vehicle navigation system in a vehicle to prevent a traffic problem; and

distributing the motor vehicle traffic flow among a plurality of detour segments in a controlled manner when there is a traffic problem and a plurality of feasible detour routes are available.